

 $= 85^{\circ}\text{C} + 0.013\Omega \times 10A \times 10A \times 50^{\circ}\text{C/W}$

 $= 150^{\circ}C$

where Ta max: ambient temperature

Ron max: on-resistance

lo max: current value

Rth (ch-a): thermal resistance between channel and environment.



REMARKS

The present preliminary amendment is submitted to correct for a minor informality in the specification, which is deemed to be self-evident from the original disclosure.

The present application is believed to be in condition for a full and thorough examination on the merits. An early and favorable consideration of the present application is hereby respectfully requested.

Respectfully submitted,

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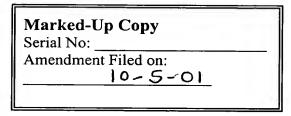
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IN THE SPECIFICATION

Page 8, beginning line 5, delete the existing paragraph and replace it with the following paragraph:

--In this control apparatus, however, the power MOS-FET used as the switching element of on/off control generates much heat. Therefore, it is necessary to perform the radiation design accurately. A channel temperature Tch max of the power MOS-FET is calculated as

Tch max = (Ta max) + (Ron max) x (lo max)

$$x (lo max) x Rth (ch-a)$$
 [... (10)]
= 85°C + 0.013 Ω x 10A x 10A x 50°C/W
= 150°C

where Ta max: ambient temperature

Ron max: on-resistance

lo max: current value

Rth (ch-a): thermal resistance between channel and environment.--